Building a Tribal Solid Waste Program	Recommended Phases and Activities to	Consider Primary Tool: <u>Tribal Decision M</u>	aker's Guide to Solid Waste Management
Phase I	Phase II	Phase III	On-Going
Engage Tribal Leaders and the	Conduct Feasibility Studies and Facility	Implement Plan	Funding
Community	Planning	Tools:	Tools:
Tools:	Tools:	Tribal Decision Maker's Guide to Solid Waste	Tribal Solid Waste Costing Tool
Tribal Decision Maker's Guide to Solid Waste	Tribal Decision Maker's Guide to Solid Waste	Management	
Management	Management		Region 10 IGAP Web Page
Create a Solid Waste Committee		Tribal Solid Waste Costing Tool	
 Ask elders, youth, tribal staff, council 	Tribal Solid Waste Costing Tool		R 10 Solid Waste Web Page
members, and others to participate		Tribal Waste Journal - Composting	
Establish regular meetings			Work toward sustainable funding
		Tribal Waste Journal - Construction and	 Establish fees – see Phase III
Task committee with asking the community	Waste Transfer Stations: A Manual for	<u>Demolition Debris</u>	 Apply for grants - consider including :
about solid waste	Decision Making		waste implementation in GAP workpl
 How do people feel about waste? 		EPA Developing an Abandoned Vehicle	 Consider loans
What do they want in a waste program?	Site Specific Flexibility Requests for Municipal	Program for Tribal Governments	 Look into public/private partnerships
What are their top priorities and biggest	Solid Waste Landfills in Indian Country		other cost-sharing arrangements
nrohlome?		ADEC Solid Waste Procedures Manual for	 Work with IHS on establishing Sanita

Develop an Integrated Solid Waste Management Plan

What are people concerned about?

information to use as a resource?

Are there past surveys, reports or other

Tools:

problems?

Tribal Decision Maker's Guide to Solid Waste Management

EPA Tribal Waste Journal - What is an Integrated Waste Management Plan?

TSWAN Solid Waste Planning Template

Zender Environmental Health Alaska Solid Waste Planning Template

Tribal Solid Waste Costing Tool

Evaluate the feasibility of building and operating programs and facilities

- What would it take to get a collection, recycling, and/or composting program up and running?
- What would it take to build and operate a transfer station, or landfill?
- What kind of equipment is needed?
- How many staff needed to keep the system running efficiently?
- How much would the tribe have to charge for collection and/or tipping fee to cover O & M?
- How much is the tribe able to subsidize?

Select Preferred Waste Alternative(s)

- Work with the Solid Waste Committee and community members to recommend a waste alternative(s)
- Obtain Tribal Council approval for preferred alternative(s)
- Include pollution prevention and minimizing waste in the overall approach.

Establish fee structure

- Calculate total costs to operate system including O&M, capital costs and contingencies
- Calculate revenues from solid waste program go back into solid waste program
- How much will the tribe subsidize?

Municipal Class III Solid Waste Landfills

- Calculate fees based on expected costs. revenues and subsidies
- Consider collection fees (monthly, pay as you throw, etc), tipping fees, other fees.
- Consider bundling utilities fees together (water, sewer, solid waste)

Develop key programs

- Waste collection program
- Household hazardous waste program
- Recycling program
- Backhaul program
- Used oil collection program
- Junk vehicle program

- g solid plan
- s or
- Work with IHS on establishing Sanitation Deficiency System solid waste projects
- Subsidize system where needed

Educate Community Members Tools:

Tribal Decision Maker's Guide to Solid Waste Management

Engage kids and elders to spread the word

- Reach out to kids at school start a school recycling or composting program to get kids involved
- · Host community clean ups, gatherings, and events
- Include education on waste minimization. recycling, composting, burning, dumping

Mapping, Tracking and Evaluation Tools:

Open Dump Form (PDF) and Open Dump Guide (PDF)

Free GIS Software for Tribes

Building a Tribal Solid Waste Program

Recommended Phases and Activities to Consider

Primary Tool: Tribal Decision Maker's Guide to Solid Waste Management

Phase I

Research your community and local environment

- Understand your community, population, geography, economy, and geology.
- Consult other planning documents
- Interview tribal planners, natural resources staff, and scientists

Do a waste assessment

- What waste types are generated on the reservation or in the community?
- How much waste is generated and from where?
- Include tribal government offices, businesses, and casino/event facilities
- Use tools in planning templates to make the waste assessment job easier
- Consider calling an EPA or TSWAN circuit
 rider for help

Evaluate the current solid waste system

- How is waste managed?
- Is there burning?
- Dumping?
- Recycling?
- What are the biggest problems?
- What is being done to prevent waste?
- What is working?
- What is not working?

Assess waste options and recommend best options

- What are the possibilities?
- What options protect the health of the community?
- What options protect the air and water?
- What is affordable and sustainable?
- Recommend best options

Phase II

- Document the reasons why a waste alternative is selected.
- Keep other alternatives in the wings in case new information comes to light or barriers get in the way of the preferred alternative.

Create Open Dump Inventory *Tools:*

Open Dump Form (PDF) and Open Dump Guide (PDF)

Locate dump sites

- GPS latitude and longitude for each dump
- Estimate the size of the site and the volume of waste on the surface
- Assess the contents and types of waste
- Estimate distance to nearest homes, surface water, and depth to groundwater
- Look at access controls.
- Are wastes burned? How often? Is cover material used?
- · Take pictures of the site and waste present
- Consider sharing dump inventory with EPA and Indian Health Service – to be a part of the national dump inventory

Develop Waste Enforcement Program *Tools:*

<u>Tribal Decision Maker's Guide to Solid Waste</u> Management

Model Tribal Solid Waste Disposal Ordinance

– National Indian Justice Center

Phase III

- Bulk waste/appliance program
- Composting program

Obtain needed land-use and construction permits

- Work with EPA on site-specific flexibility for landfills
- In Alaskan villages, work with ADEC on landfill siting and permitting

Site and construct new facilities

- Drop boxes
- Transfer station
- Landfill
- Recycling/household haz waste shed

Improve existing facilities

- Focus on site management, access, monitoring, waste separation
- Ensure equipment is the right size and reliable
- Establish equipment maintenance schedule

Clean Up and Close Open Dumps *Tools:*

EPA Tribal Waste Journal – Prevent Illegal Dumping

Illegal Dumping Prevention Guidebook

<u>Technical Advice for Cleanup of Accumulated Waste Sites</u>

Waste Management Index - Part 1 <u>Dump/Landfill O&M (PDF)</u>

Waste Management Index - Part 2 Waste

On-Going

Map and track critical points and routes

- Locate latitude and longitude of facilities and dump sites
- Track inspections and violations
- Locate and optimize collection routes
- Map key points and routes
- Keep and maintain records on dump site cleanups - cost, location, date, waste amount, waste types, monitoring plan.
- Identify patterns, behaviors through mapping and analysis of dumping

Staffing

Tools:

Training course list is not exhaustive – if you want your training course listed, contact EPA Region 10 Tribal Solid and Hazardous Waste Team

Solid Waste Training - ITEP

Solid Waste Training - TSWAN

Solid Waste Training – USDA and Zender Environmental Health

Solid Waste Training - Alaska Forum

Solid Waste Training - IHS

ADEC Solid Waste Procedures Manual for Municipal Class III Solid Waste Landfills

Waste Management Index - Part 1 <u>Dump/Landfill O&M (PDF)</u>

Waste Management Index - Part 2 Waste Separation, Staging, Recycling, Backhauling (PDF)

Building a Tribal Solid Waste Program

Recommended Phases and Activities to Consider F

Primary Tool: Tribal Decision Maker's Guide to Solid Waste Management

Phase I

Funding and sustainability

How will tribe pay for the system?

- Evaluate costs of recommended options
- Include capital costs and on-going operations and maintenance costs
- Equipment and labor costs
- Closure and post-closure care costs
- Propose a fee structure
- Estimate revenue to be generated
- Estimate tribal subsidies and other sources of funding

Obtain Tribal Council approval of plan

- This is usually a tribal council resolution
- Approval is seen as commitment to work to implement the solid waste plan
- A plan can become a living document, being revised and edited as conditions and goals change. Getting approval of the plan and subsequent revisions can be a good way to keep leaders informed and invested in the process of safe waste management.

Phase II

Develop codes and ordinances - fees, penalties

- Obtain Tribal Council support and approval
- Partner with tribal police, natural resources staff, tribal housing authority, county, city or other jurisdictions
- Work together to respond to and resolve complaints in a timely and effective way
- Work with EPA on inspections, compliance assistance, and enforcement on illegal open dumping and waste burning, where applicable
- Monitor waste dumping sites on a schedule
- Fine violators where possible
- Publicize successes post signs, send out flyers, notices, write newspaper articles, etc.

Maintain partnerships and support

- Host regular meetings to keep key departments and staff in touch
- Provide training sessions to key staff
- · Create incentives for working together
- Keep leaders informed about the program and successes
- Make the general public aware of the efforts and the health and environmental results of the work

Phase III

<u>Separation, Staging, Recycling, Backhauling</u> (PDF)

Prepare and train staff

- Purchase personal protective equipment
- Train staff on hazards/safety
- Call in the State Patrol or EPA Emergency Response Program if site appears hazardous or dangerous

Obtain needed equipment

Consider alternatives - rent, loan, purchase

Clean and maintain sites

- Separate and sort waste for recycling, backhaul, proper disposal
- Transport waste to permitted landfill/recycling center
- Monitor and pick up waste promptly partner with natural resources staff, tribal police, and other field personnel.
- Use signs, lighting, barriers, landscaping, murals, beneficial use, cameras
- Educate to community
- Share dump closure info with EPA and for Alaskan villages, ADEC.
- Includes location of dump, date closed or cleaned up, volume of waste, etc.

On-Going

Waste Burning Index (PDF)

Hire and train management and staff

- Hire solid waste manager
- Provide manager with planning, code writing, and administration training
- Hire landfill operators, transfer station operators, heavy equipment experts
- Ensure staff have adequate PPE and health and safety training
- Obtain training to operate facilities landfill operator training, transfer station operator training
- Instruct staff on safe and legal burning practices
- Provide guidelines and training to staff on weighing and monitoring loads
- Ensure staff have training on maintaining heavy equipment

Ensure management and staff stay up-todate on latest developments in solid waste

- Provide refresher training periodically
- Consider joining a group such as the Solid Waste Alaska Network or the Tribal Solid Waste Advisory Network to work with and learn from peers